

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: PORTFOLIO

Report Number: P858101

Luminaire Tested: **LD4C45D010 EU4459027 4LBMDSWMW**

Issue Date: 4/12/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P858101  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2309-186-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LD4C45D010 EU4459027 4LBMDSWMW  
Description: 4 INCH 4500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 2700K, 90CRI LEDS  
AND 4LBMDSW TRIM WITH MW FINISH  
Light Source: -  
Ballast/Driver: -

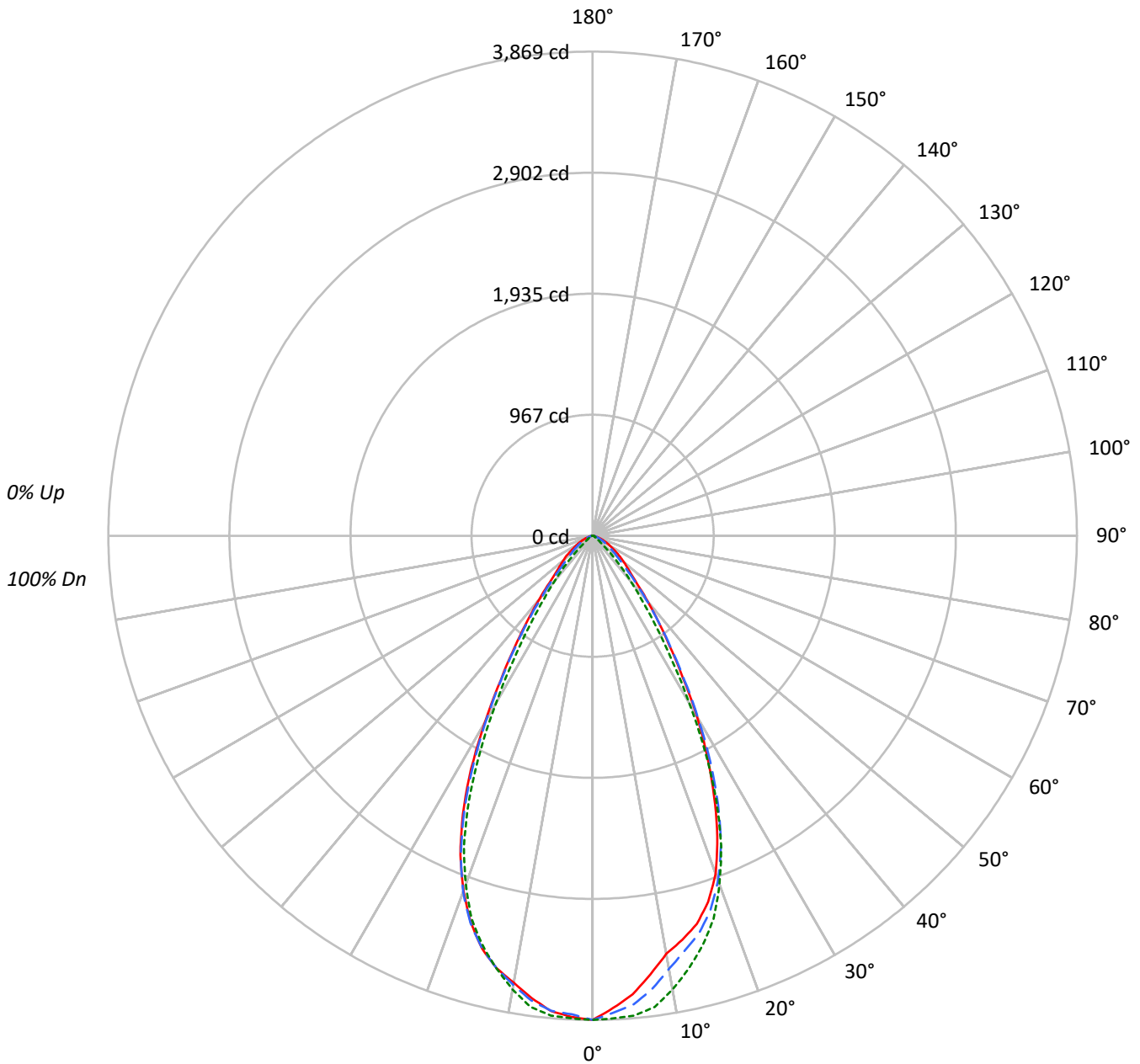
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3522.0 lumens  
Efficiency: N/A  
Efficacy: 71.0 lumens/watt  
Spacing Criteria (0/90/45): 0.88 / 0.88 / 0.85  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 49.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT

TEST NUMBER: P858101

CATALOG NUMBER: LD4C45D010 EU4459027 4LBMD5WMW

### Luminous Intensity Polar Plot





TEST NUMBER: P858101

CATALOG NUMBER: LD4C45D010 EU4459027 4LBMDSWMW

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20				
RC	80				70				50				30				10			0	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100
1	113	110	107	105	111	108	105	103	104	102	100	100	99	97	97	95	94	92	92	92	92
2	107	102	97	94	105	100	96	93	97	93	91	94	91	89	91	89	87	85	85	85	85
3	101	94	89	85	99	93	88	84	90	86	83	88	84	81	85	83	80	78	78	78	78
4	96	88	82	77	94	86	81	77	84	80	76	82	78	75	80	77	74	72	72	72	72
5	91	82	75	71	89	81	75	71	79	74	70	77	73	69	76	72	69	67	67	67	67
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	62	62	62	62
7	81	72	65	61	80	71	65	61	70	64	60	68	64	60	67	63	60	58	58	58	58
8	77	67	61	57	76	67	61	57	66	60	56	65	60	56	64	59	56	55	55	55	55
9	74	63	57	53	72	63	57	53	62	57	53	61	56	53	60	56	53	51	51	51	51
10	70	60	54	50	69	60	54	50	59	53	50	58	53	50	57	53	49	48	48	48	48

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	475308	475308	475308
5°	453544	474546	470119
10°	423010	459162	452451
15°	408475	431279	434319
20°	375741	387455	394489
25°	311421	317087	332486
30°	236904	219115	243685
35°	160400	131274	162199
40°	109247	75215	105879
45°	75786	37893	71633
50°	61676	15424	57663
55°	49906	9596	45429
60°	39633	7347	35971
65°	31279	6076	27791
70°	23599	5352	21480
75°	17041	4272	15617
80°	12664	4245	10542
85°	8458	4229	8458



TEST NUMBER: P858101

CATALOG NUMBER: LD4C45D010 EU4459027 4LBMDSWMW

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	355.7	10.1
10°-20°	934.6	26.5
20°-30°	1072.3	30.4
30°-40°	651.4	18.5
40°-50°	279.2	7.9
50°-60°	133.9	3.8
60°-70°	65.1	1.8
70°-80°	24.2	0.7
80°-90°	5.6	0.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2362.6	67.1
0°-40°	3014.0	85.6
0°-60°	3427.2	97.3
0°-90°	3522.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3522.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	3869	3869	3869	3869	3869	
5°	3678	3758	3848	3809	3812	342
15°	3212	3286	3391	3412	3415	894
25°	2297	2372	2339	2429	2453	1042
35°	1070	1084	875	1058	1082	685
45°	436	388	218	350	412	354
55°	233	173	45	155	212	210
65°	108	72	21	66	96	109
75°	36	24	9	21	33	39
85°	6	6	3	3	6	8
90°	0	0	0	0	0	



TEST NUMBER: P858101

CATALOG NUMBER: LD4C45D010 EU4459027 4LBMDSWMW

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	3868.9	3868.9	3868.9	3868.9	3868.9	3868.9	3868.9	3868.9	3868.9
2.5°	3776.3	3818.1	3815.1	3850.9	3859.9	3850.9	3827.0	3850.9	3848.0
5°	3677.7	3725.5	3758.3	3818.1	3848.0	3842.0	3809.1	3815.1	3812.1
7.5°	3534.3	3594.0	3650.8	3740.4	3797.2	3794.2	3746.4	3737.4	3725.5
10°	3390.9	3447.6	3513.3	3606.0	3680.7	3692.6	3644.8	3632.9	3626.9
12.5°	3307.2	3352.0	3396.8	3477.5	3543.2	3567.1	3540.2	3543.2	3540.2
15°	3211.6	3256.4	3286.3	3346.0	3390.9	3423.7	3411.8	3429.7	3414.8
17.5°	3068.2	3122.0	3133.9	3178.7	3211.6	3232.5	3244.5	3262.4	3238.5
20°	2874.0	2915.8	2930.8	2948.7	2963.6	2990.5	3026.4	3044.3	3017.4
22.5°	2602.1	2682.8	2679.8	2670.9	2685.8	2694.8	2751.5	2781.4	2760.5
25°	2297.4	2381.1	2372.1	2336.3	2339.2	2357.2	2428.9	2467.7	2452.8
27.5°	1977.8	2055.4	2034.5	1965.8	1947.9	1974.8	2067.4	2112.2	2103.2
30°	1670.0	1720.8	1688.0	1565.5	1544.6	1577.4	1696.9	1741.7	1717.8
32.5°	1338.4	1377.3	1362.3	1212.9	1177.1	1210.0	1350.4	1392.2	1365.3
35°	1069.5	1105.4	1084.5	908.2	875.3	911.2	1057.6	1105.4	1081.5
37.5°	857.4	884.3	857.4	669.2	639.3	675.2	815.6	878.3	848.5
40°	681.2	702.1	666.2	492.9	469.0	487.0	618.4	681.2	660.2
42.5°	537.8	552.7	513.9	361.5	334.6	358.5	466.1	522.8	510.9
45°	436.2	436.2	388.4	251.0	218.1	242.0	349.5	409.3	412.3
47.5°	373.4	364.5	304.7	167.3	125.5	158.3	277.8	340.6	349.5
50°	322.7	310.7	251.0	122.5	80.7	113.5	230.0	292.8	301.7
52.5°	277.8	268.9	209.1	95.6	56.8	86.6	194.2	253.9	262.9
55°	233.0	227.1	173.3	74.7	44.8	65.7	155.4	206.1	212.1
57.5°	191.2	182.2	140.4	62.7	35.9	53.8	128.5	170.3	176.3
60°	161.3	152.4	113.5	50.8	29.9	41.8	104.6	140.4	146.4
62.5°	134.4	125.5	92.6	41.8	23.9	35.9	83.7	113.5	119.5
65°	107.6	101.6	71.7	32.9	20.9	26.9	65.7	89.6	95.6
67.5°	86.6	80.7	56.8	26.9	17.9	20.9	50.8	71.7	77.7
70°	65.7	59.8	41.8	20.9	14.9	17.9	38.8	53.8	59.8
72.5°	47.8	44.8	32.9	17.9	12.0	14.9	26.9	38.8	44.8
75°	35.9	32.9	23.9	12.0	9.0	12.0	20.9	29.9	32.9
77.5°	23.9	23.9	17.9	9.0	9.0	9.0	14.9	20.9	20.9
80°	17.9	14.9	12.0	6.0	6.0	6.0	9.0	14.9	14.9
82.5°	12.0	9.0	9.0	6.0	6.0	6.0	6.0	9.0	9.0
85°	6.0	6.0	6.0	3.0	3.0	3.0	3.0	6.0	6.0
87.5°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-50001EG







— 0°-180°    - - 45°-225°    - - - - 90°-270°







(END OF REPORT)